

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
IN-OFFICE REVIEW/BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATIONPermit No: 79-14202

Exam Date: 05/16/15

1. Does this qualify for an in-office field exam (IDAPA 035.02.r)?
- X
- Y
-
- N

- a. **Irrigation of 5 acres or less**
 b. Storage of up to 14.6 AF for stockwater purposes only
 c. Any use other than irrigation or storage, if the combined diversion rate is 0.24 cfs or less
 d. Other < >

2. Current Owner: Name: McShane

Owner of Record Correct? X Y NAddress of Record Correct? X Y N

If No: Address

3. Beneficial Use Fees have been paid:
- X
- Y
-
- N Receipt No: W042935

4. **SOURCE****TRIBUTARY**

Salmon River

Snake River

Method of Determination: Taxlot location

Change in Source: Y X N**B. OVERLAP REVIEW**

1. Other water rights with the same place of use:
- X
- NO Overlap

Water Right No.	Source	Purpose of Use	Basis

Comments: 79-14013 – for Chamberland Inc. parcel to southeast of POU (PIN RP27N01E107210). 79-4432 for Chamberlain parcel to north of POU (PIN RP27N01E100777)

2. Other water rights with the same point of diversion:
- X
- NO Overlap

Water Right No.	Source	Purpose of Use	Basis

Comments: 79-14013 – for Chamberland Inc. parcel to southeast of POU. PODs separate pumps.

C. DIVERSION AND DELIVERY SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.	County
Salmon River	8	SE	SE	SE	10	27N	01E	Idaho

Method of Determination: GIS Imagery and application information

Change in POD? Y X N Amendment Required? Y X N

- 2.
- PLACE OF USE:**
- Use: Irrigation

TW P	RGE	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
27N	01E	10																	2.0
		Lot #																	8
Total Acres =																			2.0

Method of Determination: GIS Imagery, Taxlot Information, and Application Information. POU for 2 adjacent taxlots with a total size of 3 acres. (PINs RP0177500A001A & RP0177500A002A) See Narrative Comments for expanded explanation.

Change in POU? Y X N Amendment Required? Y X N Delivery System Diagram Attached (required). Indicate all major components and distances between components.

Indicate weir size/pipe as applicable.

 Aerial Photo Attached (required for irrigation of 10+ acres). Photo of Diversion and System Attached

4. Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size

* Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements: < >**E. FLOW CALCULATIONS** Additional Computation Sheets Attached

Measured Method:

Per App. Processing Memo #17, up to 0.03 cfs/acre for irrigation up to 5 acres acceptable. 2.0 acres(0.03 cfs) = 0.06 cfs

Per application information – 7.5 hp pump to be used. Sufficient for permitted cfs. See Theoretical Sheet

Measurement = 0.06 cfs

Permit allowed = 0.09 cfs

License recommend for 0.06 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 2.0 \times 4.0 = 8.0$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.06 \times 231 \times 1.9835 = 27.5$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 8.0$$

2. Volume Calculations for Other Uses:

G. PURPOSE OF USEIrrigation X Y N # Stock Domestic # of Homes

Other: < >

Change in Purpose of Use? Y N

Method of Determination: Information provided by permit holder.

If Yes: From Use To Use Amount CFS AFA **H. NARRATIVE/REMARKS/COMMENTS**

- Season of Use: 03/01-10/31 (231 days)
 Headgate: 4.0
 Cons. Use: 3.0

Water District None
Groundwater District None

Conditions

WB9	Water shall not be diverted under this right when flow in the Snake River is below the established minimum flow amount of 13,000 cfs at Lime Point.
029	Prior to the diversion and use of water under this approval, the right holder shall comply with all fish screening and/or fish passage requirements of the Idaho Department of Fish and Game.
X15	A fish screen of 1/4 inch or smaller mesh shall be installed and maintained at the point of diversion.
X16	The approach velocity at the point of diversion shall not exceed 0.8 feet per second.
121	The Director retains jurisdiction to require the right holder to provide purchased or leased natural flow or stored water to offset depletion of Lower Snake River flows if needed for salmon migration purposes. The amount of water required to be released into the Snake River or a tributary, if needed for this purpose, will be determined by the Director based upon the reduction in flow caused by the use of water pursuant to this permit.
R68	This right when combined with all other rights shall provide no more than 0.03 cfs per acre nor more than 4.0 afa per acre at the field headgate for irrigation of the lands above.

Per email from D. Nelson dated 12/10/2014 – Not contacting owner regarding fish screen. Will carry conditions onto license.

Place of Use: POU for 2 adjacent taxlots with a total size of 3 acres. There is a home and large shop along with extensive parking visible on the 2013 imagery. Applicant applied for an extension 2013 therefore using 2013 as imagery to base POU acres. The area appears to be poorly surveyed which is causing less than perfect alignment of the taxlot, public land survey, and GIS Imagery. I chose to use the GIS Imagery as the base layer for deriving the POU. This placed the taxlots of the POU in the northern portion of the SESE QQ and slightly into the NESE QQ. This placement also causes an overlap with the GIS POU for 79-4432. This overlap is not a true overlap.

The majority of the taxlot area in the NESE QQ are the home and driveway and hence, not irrigated. Less than 0.05 acres of potentially irrigated acres are in the NESE, therefore irrigated acreage in the NESE QQ would not affect to total irrigated acres. Based on this determination, no amendment is needed.

Per extension of time information, there is also a well on the property.

Have conditions of permit approval been met? ☒ Yes ☐ No

I. RECOMMENDATIONS

1. Recommended Amounts

BENEFICIAL USE	PERIOD OF USE	DIVERSION RATE	ANNUAL VOLUME
Irrigation	03/15 to 10/31	0.06 CFS	N/A AF
Totals:		0.06 CFS	N/A AF
Exempt: IDAPA 37.03.02(j) (viii)			

2. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☒ None

Other: < >

J. AUTHENTICATION

Field Examiner's Name Darrelli Tamm Date 05/16/15

Reviewer Daniel A. Wade Date 5-27-15

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 79-14202
 Reviewer: D. Favreau
 Date of Review: 3/16/2015

P/D No.:	Senerio 1	Senerio 2	Senerio 3
PUMP HORSEPOWER	7.5	7.5	7.5
BOOSTER HORSEPOWER	0	0	0
PUMPING LEVEL	50	50	50
DISCHARGE PRESSURE	40	50	60
RATE OF FLOW (cfs)	0.32 146	0.28 125	0.24 110
			0.28 126.94

The above calculates the formula = $Q = \frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}}$

Assumptions: 70 efficiency.
 No Friction

Examiners Notes:

The horsepower as indicated on application. The pressure was estimated by using the standard for pressure tank turn on and shut off of 40 to 60 psi. The lift was estimated using the maximum deliniation between the topo map's elevation lines along the property plus the depth of well.

75-14202



0 12.5 25 50 75 100 Feet

D. Favreau 06/08/15

NAIP 2013

0.03
AC
nitrogen

NESE

10 27N01E

SESE 8

SESE

